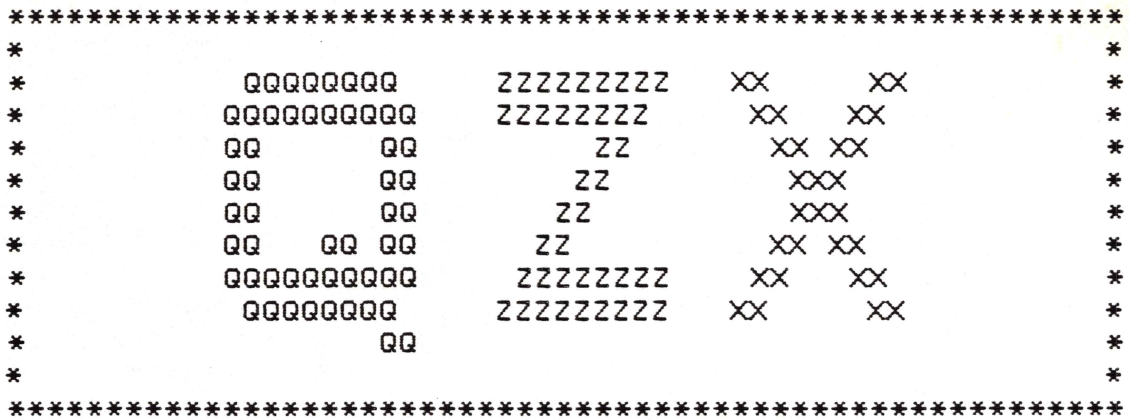
QQQQQQQ ZZZZZZZZZ XX XX
QQQQQQQQQ ZZZZZZZ XX XX
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QQ

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ZX80; Micro-Ace; ZX81; TS1000, 1500, & 2068; QL; Z88
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EDITOR'S NOTES
K5XY

I received a letter the other day from Peter Hale, who is the editor of the Sinclair newsletter for the Boston Computer Society. He gave some details of the origin of the QL program, MIKE_TERM, which was printed in the April issue of QZX. That program proved to be quite popular and useful.

Peter said that when a group of QLers in Boston started to go online after buying a pile of modems at a flea market, they had the QL's 300 baud problem to contend with. They did not want to buy modaptors before finding out whether or not modeming was going to be practical.

MIKE_TERM's origins were a program in the QUANTA software library called terminal_bas. It did not work. Mike Mitchell fixed it and added the choice of data rates and a minimal bell (beep) to avoid having to type "over to you".

The Timex-Sinclair group said they were somewhat overwhelmed at the circulation the program had gotten. They counted at least 6 newsletters and the recent UPDATE magazine that have used it, but they did not realize that as a practical program it would find its home in packet radio.

Z88 FILE TRANSFER TO THE QL
Dave Bennett (HATS)

A homemade cable and the program Q_Link of the QL works fine for transfering files from the Z88 to the QL and the QL to the Z88. Files transfer very quickly at 9600 baud.

To send a file from the Z88 to the QL, set identical data rates on both machines, and then hit F5 to open the QL capture buffer. Send the file with Import-Export. Once the file has transferred, hit F5 on the QL again to close the capture buffer. Go into the Q_Link editor with F4. Check if the file is really there and save it.

To send a file from the QL to the Z88, load the file into the Q_Link's editor. Set the Z88 to receive, then transmit the file with Transmit on the QL. Type "Y" to send carriage returns and line feeds. Once you hit "Y" the transfer begins immediately, so start receiving on the Z88 just before hitting enter on the QL. Use the following cable connections.

Z88 DB-9		QL SER2 DB-25
2	----------	3
3	----------	2
4	----------	5
5	----------	4
7	----------	7
8	----------	4

ZX81 PROGRAM ENDING
K5XY

QZX for last month contained a simple program which performed calculations on parallel resistors. It left as an exercise for the reader a more sophisticated way of ending the program with the promise of another ending this month for those too busy to write their own. The ending was as follows.

```
200 PRINT
210 PRINT "DO YOU WANT TO DO
          ANOTHER CALCULATION
          (Y OR N)"
220 INPUT A$
230 IF A$="Y" THEN GOTO 100
240 PRINT "THAT IS ALL FOR NOW."
250 STOP
```

This ending, in line 230, recirculates program control back to line 100 if a Y is typed in. It passes control to line 240 and stops if anything other than a Y is entered.

Here are some lines to insert into that ending to stop the program only if an N is entered.

```
232 IF A$="N" THEN GOTO 240
234 PRINT "YOU DID NOT TYPE
          EITHER A Y OR AN
          N THEREFORE I AM
          UNCERTAIN AS TO
          WHAT YOU WANT ME
          TO DO."
236 GOTO 200
```

This new ending asks the operator to answer the question about doing another calculation again if the first answer was not one of the two choiced offered. Note that here I have taken advantage of the gaps I left in the line numbers in the origianl program. I have still left some gaps for ohter lines if I happen to think of some useful ones.

Note also that all the lines after 200 could be saved for use in other, similar programs. Actually the lines 200 to 250 could be used as an ending in a wide variety of programs. You should keep a notevook of these useful parts of programs to make the creation of other programs easier. If this is done with this ending the lines should be remumbered to keep the line spacing at 10.

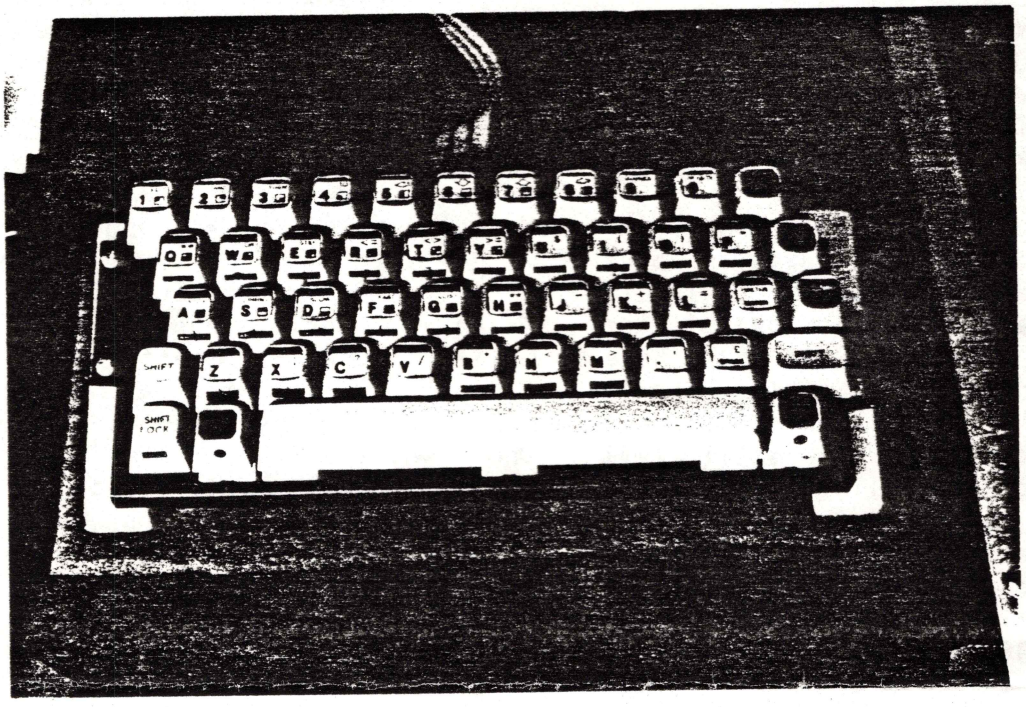
A LITTLE HUMOR
The Capacitor

Antenna - Uncle Joe's wife
Dipole - Very sick tadpole
Driven element - New type of weather control
Dummy load - Trunk full of mannequins
Electronic key - What you use to enter a Bunny Club
Feedback - Letter to the Editor
FET - New French island prefix
Field strength indicator - Soil tester
Gamma match - Device for lighting radioactive cigarettes
Gate bias - A hallowe'en prank
Henry - Guy who's wound up
Micro-Henry - A little guy wound up
Inductor - Drafting a woman into the army
Integrated circuit - One who integrates white noise with black noise.
LED - Lid with an Extra class license
Load lines - Freight railroad
Log periodic - Sawmill feed
Matching section - Organizational unit in Arson Division, Crime, Inc.
Mixer - To achieve equality
Noise figure - comment about Miss America
NOR gate - an open path ot Europe
Ohm - Where a British ham lives
OSCAR - Identified flying object
Photomultiplier - Person who takes two picture
Resistor - What a man should do when attacked by a female
Solid state - KL7 in December
Source follower - Narcotics agent
Transformer oil - Beauty aid
Volts - What a politician needs to get elected
Yagi boom - Explosion in JA land

KEYTOPS
KF5GG

Enclosed is a picture of the keyboard I use with my T/S computer. The figures and characters are standaed Timex-Sinclair, and were in fact taken from an excess T/S keyboard. Hal-Tronix did (and perhaps still does) sell the keyboards for about $3.95). With a little care and a lot of patience, the top can be peeled away from the membrane surface in one piece. The letters, characters, and words can then be cut apart and applied to the

new keyboard. The only problem I had was in making the cut-outs, which are flat, conform to the cupped keys on the TI board. A little contact glue on each one took care of that. The black keys are just excess and not connected. It results in a nicely marked keyboard, and one that is quite durable. This one has been in use for about four years and the cutouts have remained firmly in place.



WEST COAST TS NET
WA6OUC

WA6OUC reports that the West Coast T/S Computer net is still going strong on 40 meters. It meets every Saturday morning at 10:00 AM on 40. The frequency is 7.235 MHz and the net is based on QZX.

The first record that he has of this net is March 26, 1983, although the net was started months before by BOB, W6AMW in Mc Cloud, CA. Bob has gone on to other computers and to writing programs for satellite tracking, but still checks in once in a while.

Although conditions on 40 are still pretty bad and there are times when somebody trys to check in and conditions are so bad they can just barely be heard, the net members do the very best they can and feel bad when a contact can not be completed.

WA6OUC starts an early checkin list at 9:45 AM and invites everybody to call him then.

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QL'n PACKET
KV3Q, Bob Diggs

Alex in July, "Friends of QZX", told the readers I was trying to put my QL on Packet. I am proud to say that I have done it and since there seems to be so little written about it I'll tell what I know and hope the ball will start to roll and more knowledgeable people will fill in the gaps.

My Packet activity has been limited to 2 meter using an MFJ-1270B TNC connected to Ser2. I have the unexpanded QL, no floppies, just microdrives. I use two programs: QLTerm by Richard Moldavan and Mike_term from April QZX. Each has a special use, each has different problems and neither is completely satisfactory. However, I am using my QL on Packet and it is available whenever I want it! Ser1 goes to my CITIZEN 120D printer and Ser2 is connected to my TNC.

My old setup used either the T/S 1000 or 1500, COMLINK II, and an Alphaacom 32 printer. A very satisfactory set up, indeed, primarily because I could dump the screen to the printer, something I can't do with my QL. I still use the 1500 on occasion but the keyboard and a few other things about this great computer have put it on the back burner.

I ordered my QL just before we took off for South Africa last December and had it shipped to Florida where it is better for us ole folk in the winter. Incidently, I had a ball operating in one of the new tribal homelands, The Republic of Ciskei, as S42Q. But that's another story. When we got back in mid January, there it was- a real sophisticated computer for an ole fogey, who had to start all over again. And, incidently, this story is coming by way of Quill on my QL and CITIZEN 120D printer.

I had no idea how to run the machine much less get on Packet. I used my T/S 1000 with only moderate sucess. I need a better antenna system in Florida, for sure. This year we will go there on our sailboat and I'm sure the antenna up fifty feet will do better.

I went to the Winterfest at Orlando hoping to get information about Packet only to be asked by almost everyone, "What's packet?" All was not lost because I was guided toward QLTerm and learned the Ser2 pins are not as shown in QLUG. That became academic because I bought a standard cable and it works just fine. Befor leaving the Winterfest I ordered QLTerm from Sharp's, because if it worked so well on a modem, then it was bound to work on Packet.

My first attempt at QL'n Packet and QLTerm was a big disappointment because I was using TV instead of a monitor. I called Sharp's to find out if my problem was the TV connection. He was sorry, of course, but that was the trouble and it was my problem. Someday I'll write to Mr Moldovan and find out how to modify his program for TV. I prefer to use the monitor, hoewver, when operating from a sailboat, the TV is available and the monitor is excess baggage. I had hoped that QZX and CTM would be forwarded to me and those reliable sources would get me started. No such luck, these were not forwarded and I would have to wait 'til I got home to learn the published word. So that was the end of my QL'n Packet activity in Florida. My attention then went to finding a printer I could afford and liked. I have been pleased with this CITIZEN and the price was right!

Back home in Maryland, I found out that the USMail had fouled me up by not saving any periodicals such as QZX and CTM. All that packet information down the drain? Baloney! There wasn't any as I found out when I had the back issues replaced. The April QZX arrived in May (Alex that was one time I was glad you were late!) with a program by Michael Mitchell. Another disappointment; it needed a monitor and I didn't know how to change it for TV.

In July - I GOT A MONITOR! Now I could do everything! So, enough of the preliminaries, let me tell you what happened.

QLTerm (Monitor required)

When I first ran this it worked OK, but there seemed to be a problem between the computer and the TNC. They just didn't want to communicate without messing up some of the characters. Packets went out OK in spite of the garbage on the screen. I left it alone for a period while I played with Mike_term and tried to solve problems I had with that program. No luck. Back to Qlterm.

I was on packet with my T/S 1500 and COMLINK II and doing OK with a baud 300 as required by the COMLINK. My idea was, to use either computer, I had to use baud 300. Qlterm allows other baud rates and, with Mike_term in mind (either 300 or 1200), I set the TNC to 1200 baud and stopped using the 1500/COMLINK.

What a difference a baud makes! The garbage dissappeared from the screen.

At last I had a program working. The first time I tried to delete - no luck. I found <CTRL-H> did the job. I also had to learn to use F5 to get from converse to command . The screen filled so fast, I had to use <CNTRL-S> well in advance to stop and read the screen. There is no screen dump as you have with the COMLINK. I suppose there is software I can buy to do this. I wish I had such a program. To open a file you must name the device, ie: "mdv1_itm" to open a file for W3ITM-9. The next problem is how to read the file. I tried: "COPY mdv1_itm to scr". The lines flew by so fast there was no way to read them. There had to be a good way; the program I use to read my files is:

```
10 REMark read file
20 WINDOW 465,204,6,0
30 INPUT "Enter a file:" ! a$
40 OPEN_IN #6,a$
50 FOR record = 1 TO 200
60      INPUT #6,item$
70      PRINT ! item$ !
80      PAUSE
90 END FOR record
100 CLOSE #6
```

Remember, a$ must name a device, such as mdv2_filename; line 80 scrolls one line at a time, using the space bar.

Using qlterm to make a file is not the easiest thing. It goes like this:

1 Enter <CNTRL-S> to halt the display
2 Enter program command mode via F3
3 Open file, device_file name
4 Return to terminal mode
5 Enter <CNTRL-Q> to resume output from your TNC to your computer
6 After file information is completed, enter <CNTRL-S>
7 Enter command mode via F3
8 Close file.
9 Quit or return to terminal mode

Then, if you want to read the file you have to go to super basic, etc. That's why I need a screen dump in the program. I do have on file such things as SENodes, showing path from North Carolina to Florida, for example.

Mike_term

This program is the one I use most of the time. I only use qlterm if I think I want to make a file. I had my troubles when I started because I copied the program wrong. I had overlooked the ";" at the end of line 270. It was wierd to see one character at a time scrolling up the left edge of the screen. Once the missing semicolon was in place, things looked better but there was no cursur and the normal delete/backspace printed a "B"!

Delete/backspace is <CNTRL-H>, but without a cursur, it's hard to use. I use <CNTRL-X> and start the line over or include the mistake if it's not too bad. I can not find any way to get a cursur on the screen.

I changed the window and a few minor items for TV and it works just fine. This program needs a screen dump and a file procedure would be a fine thing if it were not too complicated. I like this program because it loads fast and goes to superbasic with no problems.

Summary

Serial2 pins:

1 Grnd	4 DTR	7 Grnd
2 TxD	5 CTS	8
3 RxD	6 Grnd	9 +12V

QLTerm

Monitor needed
Use 1200 baud
Displays information faster than I can read it
Use <CNTRL-H> for delete/backspace
Has a file capabi[illegible]
No scre[illegible]ility
[illegible]een dump
Won't go to QL programs after you quit

Mike_term

Monitor or change window for TV
Displays information at a comfortable speed
Use <CNTRL-H> for delete/backspace
Use <CNTRL-X> to cancel line
No curser
No file capability
No screen dump
Goes to superbasic with no problem
Loads quick and easy to use

Other

I tried two other programs (Qcode and Qlink) without success. The copies I borrowed may be bad. I will try to learn more about them and report later if I have any success with these or any other programs.

FOR SALE: Index to QZX consisting of a book of xerox copies of all the covers since December 1982. Send $5.00 plus $1.00 shipping and handling ($2.00 if to a non-US address) to QZX, 2025 O'Donnell, Las Cruces, NM 88001.

WANTED: Schematic and/or detailed maintenance info for 2040 printer. Will gladly pay costs of copying and mailing. Geo. Fariss, 1214 Meges St., Las Cruces, NM 88005.

FOR SALE: Book Easy-up Antennas for Radio Listeners and Hams by Edward Noll. Paperback (1988) 162 pages. Originally $16.95, now $11.00 postpaid in the US. A Sams publication. The title says it all. Alex. F. Burr, K5XY, 2025 O'Donnell, Las Cruces, NM 88001.

QZX Discount: 15% discount on all orders mentioning QZX. T & C Services (address in ad this issue.)

WANTED: Keyboard for Timex 1500 computer. Edward Radtke, 1602 Woodluck Ave., Louisville, KY 40205.

FOR SALE: Book ZX81 BASIC Book by Robin Norman. Paperback 190 pages. Originally $12.95 now $6.00 postpaid in US. Simple and clear introduction to ZX81 BASIC. Alex. F. Burr, K5XY, 2025 O'Donnell, Las Cruces, NM 88001.

UNCLASSIFIED ADS

WANTED: UNCLASSIFIED ADS for publication in QZX. Cost is 1 cent for each keystroke (characters, blanks, etc.). Payment must be included with order. This is an excellent way to sell your program or unwanted equipment, ask for help, or find a specific program. Send your ad with payment to QZX, 2025 O'Donnell, Las Cruces, NM 88001.

QZX FRIENDS

WB7SWB -- John resubscribed after a lapse of 18 months and a move to another state.

Dan Pinko wrote that he was very intersted in the article on satellite information by WA6DLI. He would also like to buy a tape of the program mentioned. He was not the only person to express interest in the information contained in the article either.

73, K5XY

QZX presents the best software & hardware projects available for the radio amateur. While the contents are believed to be accurate, no warranty is extended on any program or project. No investigation has been made of the claims or reputation of any advertiser. It would be greatly appreciated if all correspondence requiring an answer would be accompanied by a self-addressed stamped envelope (SASE). Copyright by QZX, 1988. All righs reserved, photocopying by permission only.

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